WHAT IS CLAIMED:

We claim,

1.   A method of scheduling threads and timer mechanisms of events in a computer system comprising:

implementing a timer mechanism that allows a micro-second level accuracy;

allowing aggregation of said events to improve performance; and

avoiding excessive processor overhead resulting from entry and exit interrupts.

2.   The method of claim 1 wherein the timer mechanism is a ring structure with an associated control block.

3.   The method of claim 1 wherein implementing the timer mechanism includes triggering a monostable timer to gate interrupt enables to batch servicing of interrupt requests.

4.   The method of claim 1 wherein the timer mechanism includes generating an array of ring slots that permits the implementation of a circular array queue.

5.   The method of claim 4 wherein the circular array queue is structured as a last in, first out (LIFO) queue.

6.   The method of claim 4 including setting a number of timer events in the ring slots that invokes handler functions that include a terminating event function.

7.   The method of claim 6, wherein the terminating event for the ring slot with a highest address allows the first slot in the rung to be processed first.

8.   The method of claim 2, wherein the control block contains addresses corresponding to a first ring entry, a total number of entries, and an entry for a time period between adjacent ring entries for queuing basic operations.

9.   A computer-readable medium having computer-executable instructions for performing a method comprising:

implementing a timer mechanism that allows a micro-second level accuracy;

allowing aggregation of said events to improve performance; and

avoiding excessive processor overhead resulting from entry and exit interrupts.

10.   The computer-readable medium of claim 9 wherein the timer mechanism is a ring structure with an associated control block.

11.   The computer-readable medium of claim 9 wherein implementing the timer mechanism includes triggering a monostable timer to gate interrupt enables to batch servicing of interrupt requests.

12.   The computer-readable medium of claim 9 wherein the timer mechanism includes generating an array of ring slots that permits the implementation of a circular array queue.

13.   The computer-readable medium of claim 12 wherein the circular array queue is structured as a last in, first out (LIFO) queue.

14.   The computer-readable medium of claim 12 including setting a number of timer events in the ring slots that invokes handler functions that include a terminating event function.

15.   The computer-readable medium of claim 14, wherein the terminating event for the ring slot with a highest address allows the first slot in the rung to be processed first.

16.   The computer-readable medium of claim 10, wherein the control block contains addresses corresponding to a first ring entry, a total number of entries, and an entry for a time period between adjacent ring entries for queuing basic operations.